



## Site Assessment Review Guidesheet

When it comes to managing stormwater runoff from your site, the costs for construction and long-term maintenance may catch you by surprise. The planning phase of any project is critical to identify issues and identify effective solutions for managing stormwater so your project can be a success.

**The Site Assessment Review (SAR)** process is required by chapter 15.19 of the Bainbridge Island Municipal Code (BIMC) and is an opportunity for you and your design professionals to meet with City staff to discuss your project and learn more about the stormwater requirements for your project. During a SAR, you will receive feedback from a Development Review Engineer and other City staff as appropriate. City staff will assist you in identifying project requirements and potential issues; staff will not provide or suggest a specific stormwater design for your project but may provide recommendations on Low Impact Development (LID) strategies applicable to your site and project.

Anyone can complete the application and schedule a SAR. However, some projects are very complex and require design by a Washington State licensed professional engineer. If your project requires an engineered design and report, it is best to work with your engineer when completing the application and include them when attending a SAR meeting.

A SAR is required for nearly all projects. If your project is required to complete the preapplication process described in section 2.16.020G BIMC, *proof that you or your engineer has attended a scoping meeting must be presented during the application process on any subsequent permit applications*. If your project does not require the preapplication process, then you must complete the SAR prior to submitting any other applications.

Though not required of all projects, it may be beneficial for even small projects to undertake the SAR process.

### **Step 1: Complete the application form**

Fill in the Site Assessment Review Application and provide answers to all questions as they relate to your project. Completing the form will require you to calculate existing and proposed land cover areas within the *project limits*. The *project limits* are defined as that portion of a property or properties subject to land disturbing activity, new hard surface, or replaced hard surfaces. The requirements of the BIMC 15.20 are evaluated based on the thresholds of new or replaced hard surface and the amount of land disturbance and hard surface proposed by the project.

### **Step 2: Prepare additional items for your application (if applicable)**

The following information about your project should be included with your application. Please provide the application and these two supporting documents in digital format (e.g., Microsoft Word document or a PDF copy). A hard copy may be submitted at the permit counter in Planning & Community Development, but electronic copies are preferred. *Applications submitted without a site plan or project narrative will not be accepted.*

- **Existing Condition Site Plan** that includes (where applicable): *(a map of this data may be created online at <https://cityofbi.maps.arcgis.com/apps/webappviewer/index.html?id=1f45495152684c50b5b8a9d9a5c19745>). This map tool can also be accessed by going to the LID Information page at, <http://www.bainbridgewa.gov/882/LID-Links-Guidance>, and clicking the link for the SAR Map Application.*
  - ☐ Parcel boundary, right-of-way lines, and easements
  - ☐ Existing site topography
  - ☐ Locations of existing buildings
  - ☐ Existing roads, driveways, parking lots, and other hard surfaces
  - ☐ Mapped or known critical areas onsite or in proximity of the site (e.g., steep slopes, wetlands, streams, groundwater protection areas, etc.)
  - ☐ Location of offsite drainage courses or downstream discharge points/outfalls
  - ☐ Location of private and public utility (water, sewer, storm) infrastructure
- **Preliminary soils information/mapping** (available at [websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx](http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx) )
- **Proposed Site Feature** (to be indicated on the existing conditions site plan)
  - ☐ Areas proposed for clearing of native vegetation
  - ☐ Areas for stormwater dispersion, open space, or tree preservation
  - ☐ Areas of substantial grading and earthwork
  - ☐ Proposed areas and location of Low Impact Development (LID) features, flow control facilities, and runoff treatment facilities
- **A Project Narrative** that describes:
  - ☐ The zoning, use, and type of development proposed (e.g., single-family residential, multi-family, commercial, industrial, etc.)
  - ☐ Information regarding onsite soils – *a full site soil investigation is not required at this phase provide general soil types from Web Soil Survey results*
  - ☐ Discussion of feasibility for stormwater facilities, specifically on-site LID stormwater practices and assessment of infiltration potential on the site
  - ☐ Project phasing and timing of clearing, grading, demolition, and construction of improvements
  - ☐ Any existing stormwater facilities or improvements onsite
  - ☐ On redevelopment projects, include discussion of the value of proposed improvements and assessed value of existing improvements on the site

### **Step 3: Submit your application and schedule and attend your meeting with staff**

Site Assessment Reviews are scheduled each week for Thursday afternoons at City Hall in the Planning & Community Development (PCD) department. Meetings should be scheduled at least one week in advance. Staff may deem your application information sufficient to make a determination under SAR. If it is determined that your application shows that you have considered/implemented LID to the maximum extent practicable, as required by BIMC 15.19, then staff may waive the requirement for a SAR meeting.

To schedule a SAR, please submit your application, site plan, and project narrative to the City at the PCD counter. City staff will coordinate with you to confirm your appointment time. Applications may

be submitted at any time that the PCD counter is open. Applications submitted during Development Engineering counter hours (M, W 8am – 10am) may be eligible for an over the counter review/approval. To be eligible for an over the counter review/approval you must submit your application during open Development Engineering counter hours (M, W 8am – 10am) and your project must meet the following minimum requirements:

- Be exempt from full SAR review

**OR**

- Be proposed on a development previously designed and reviewed under the LID standards addressed by SAR, and
- Meet all conditions required by that land use action

**OR**

- Be residential development or redevelopment, and
- NOT require Stormwater Minimum Requirements (MR's) 1 – 9, and
- Disturb <40% of your total site, and
- Propose to use infiltration, rain gardens, or bio-retention to control runoff from all new or replaced hard surfaces

You can also submit your complete application via email at: [PWPermits@bainbridgewa.gov](mailto:PWPermits@bainbridgewa.gov). Please put *SAR Application* in the subject line. For projects claiming and exemption from the SAR process, please put *SAR Application – Exempt*, in the subject line to expedite processing.

## **Definitions**

### <sup>1</sup> **Redevelopment**

Redevelopment is divided into two groups of projects. The first is any development on a lot that legally existed prior to Feb 10, 1999\*. The second type, typical redevelopment, is development on a site that is already substantially developed (i.e., has 35% or more of existing hard surface coverage) where the creation or addition of hard surfaces; the expansion of a building footprint or addition or replacement of a structure; structural development including construction, installation or expansion of a building or other structure; replacement of hard surface that is not part of a routine maintenance activity; and land disturbing activities is planned to occur. The flow-charts included in the "reference" section can assist in this determination.

### <sup>2</sup> **New Development**

Land disturbing activities, including Class IV -general forest practices that are conversions from timber land to other uses; structural development, including construction or installation of a building or other structure; creation of hard surfaces; and subdivision, short subdivision and binding site plans, as defined and applied in Chapter 58.17 RCW. The flow-charts included in the "reference" section can assist in this determination.

### <sup>3</sup> **Hard Surface**

An impervious surface, a permeable pavement, or a vegetated roof.

### <sup>4</sup> **Tree Unit**

A significant tree as defined in BIMC 16.18.020.

### <sup>5</sup> **Impervious Surface**

A non-vegetated surface area which either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development. A non-vegetated surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, roof tops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled, macadam or other surfaces which similarly impede the natural infiltration of stormwater.

\*Lots are created by many different actions, including subdivision, short-plats, etc. After Feb 10, 1999, these actions were regulated, in part, by the various stormwater regulations adopted on or after that date. As such, some level of stormwater mitigation is inherent in these lots.

## REFERENCE SECTION

### LID BMP Descriptions and associated Ecology Stormwater Manual BMPs

#### Post-Construction Soil Quality and Depth

**BMP T5.13:** Post-Construction Soil Quality and Depth - Establishing soil quality and depth regains greater stormwater functions in the post development landscape, provides increased treatment of pollutants and sediments that result from development and habitation, and minimizes the need for some landscaping chemicals, thus reducing pollution through prevention.

#### Full Dispersion

**BMP T5.30:** Full Dispersion - fully disperses runoff from impervious surfaces and cleared areas of development sites that protect a-discharge area on the site in a forest or native condition.

#### Bioretention

**BMP T7.30:** Bioretention Cells, Swales, and Planter Boxes - Bioretention provides removal of many stormwater pollutants, and reductions in stormwater runoff quantity and slows runoff flows. Where the surrounding native soils have adequate infiltration rates, bioretention can help comply with flow control and treatment requirements. Where the native soils have low infiltration rates, underdrain systems can be installed and the facility used to filter pollutants and detain flows that exceed infiltration capacity of the surrounding soil.

#### Downspout Dispersion

**III-3.1.2 Downspout Dispersion Systems (BMP T5.10B)** - Downspout dispersion systems are splash blocks or gravel filled trenches, which serve to spread roof runoff over vegetated pervious areas. Dispersion slows runoff entering into the conveyance system, allowing some infiltration, and providing some water quality benefits.

#### Perforated Stubout Connection

Kitsap Stormwater Design Manual - Volume II Design Standards - **5.4.7 Perforated Stub-out Connections** – A perforated stub-out connection is a length of perforated pipe within a gravel-filled trench that is placed between roof downspouts and a stub-out to the local drainage system. This BMPs allows for some infiltration and flow speed reduction.

#### Retain Existing Trees

**BMP T5.16: Tree Retention and Tree Planting** - Trees provide flow control via interception, transpiration, and increased infiltration. Additional environmental benefits include improved air quality, carbon sequestration, reduced heat island effect, pollutant removal, and habitat preservation or formation.

#### Permeable Pavement

**BMP T5.15: Permeable Pavements** - Stormwater from vehicular pavement can contain significant levels of solids, heavy metals, and hydrocarbon pollutants. Both pedestrian and vehicular pavements also contribute to increased peak flow durations and associated degradation of streams and wetlands. Permeable pavement encourages stormwater to infiltrate

and, as a result, improves water quality and reduce flows.

### **Sheet Flow Dispersion**

**BMP T5.12: Sheet Flow Dispersion** - Sheet flow dispersion is the simplest method of runoff control. This BMP can be used for any impervious or pervious surface that is graded to avoid concentrating flows. Dispersed flows emanating from properly graded surfaces only need to traverse a narrow band of adjacent vegetation for flow reduction and treatment to occur.

### **Concentrated Flow Dispersion**

**BMP T5.11: Concentrated Flow Dispersion** - Dispersion of concentrated flows from driveways or other pavement through a vegetated pervious area attenuates peak flows by slowing entry of the runoff into the conveyance system, allowing for some infiltration, and providing some water quality benefits.

### **Vegetated Roofs**

**BMP T5.17: Vegetated Roofs** - Vegetated roofs (also known as green roofs) are thin layers of engineered soil and vegetation constructed on top of conventional flat or sloped roofs. Benefits provided include stormwater volume reduction and flow attenuation.

### **Minimal Excavation Foundations**

**BMP T5.19: Minimal Excavation Foundations** - Low impact foundations are defined as those techniques that do not disturb, or minimally disturb the natural soil profile within the footprint of the structure. This preserves most of the hydrologic properties of the native soil. Pin foundations are an example of a minimal excavation foundation.

### **Rain Water Harvesting**

**Rain water harvesting** usually involves larger cisterns or multiple barrel systems that can store enough water to help water landscapes during our long dry summers. Simple practices like [amending soil with compost](#), mulching, and [smart watering](#) are the first steps to storing and conserving water.

### **New Trees**

See - **Retain Existing Trees - BMP T5.16: Tree Retention and Tree Planting**

## Basic Site Plan Check List

The site plan must be legible and easily understood by professionals as well as the public. Clearly differentiate between existing and proposed development. The site plan may need to be shown on multiple sheets for clarity. The information to help prepare a site plan is readily available to the public:

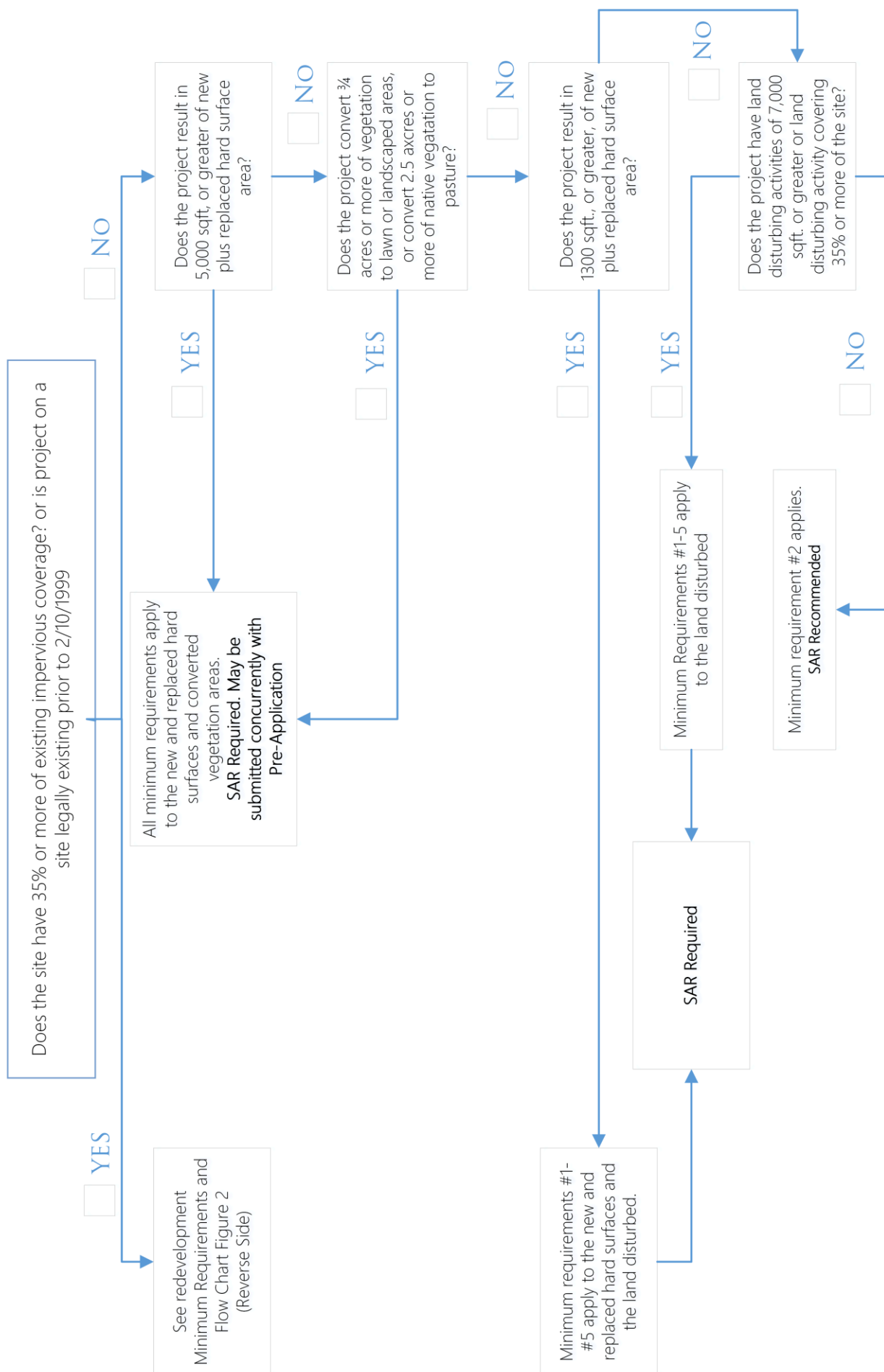
City Resources  
Municipal Code  
Public GIS  
SAR Map Tool

County Resources  
Auditor's Records  
Assessor Records

Public Health District  
Well / Septic Records

- ☐ Plan sheet 11" x 17" or 22" x 34" in size
- ☐ Engineer's scale, for example: 1 inch = 20 feet
- ☐ Title block: Project name; owner name; site address, tax parcel number; subdivision name
- ☐ North arrow
- ☐ Vicinity map
- ☐ Quarter section, township and range
- ☐ Depict the entire property and the area within 150-foot radius of the property
- ☐ Zoning / Comprehensive Plan designation
- ☐ Property boundaries (bold line)
- ☐ Lot size and lot area (BIMC 18.12.050)
- ☐ Easements: Include access, utility, other (e.g. use easements, conservation easements)
- ☐ Zoning setbacks or subdivision setbacks / buffers (as applicable)
- ☐ Contour lines at five-foot intervals minimum, two-foot interval are preferred (existing and proposed)
- ☐ Critical areas and their buffers / setbacks: Label top/toe of slopes greater than 15 percent and top/toe of slopes 40 percent or greater, floodplain, wetlands, streams
- ☐ Shoreline jurisdiction: Include OHWM, shoreline structure and side yard setback, shoreline buffer Zones 1 & 2, areas of native vegetation, location and size of significant trees
- ☐ Vegetation protection areas (e.g. "no-build zones", landscape buffers, designated wildlife corridor)
- ☐ Exterior dimensions of all existing and proposed structures: Clearly differentiate between existing and proposed. Label each structure by its use (e.g. garage, landscape / retaining wall, eave, fence, mechanical equipment)
- ☐ Impervious surface areas (existing and proposed): Label and dimension each area (e.g. building, driveway, parking area, patio)
- ☐ Area of disturbance: Area expected to be disturbed by construction and vegetation retention area
- ☐ Stormwater facility: Location / management method (e.g. dispersion, infiltration, detention)
- ☐ Sewer / septic system facility: Include lines, primary and reserve drainfields and setbacks
- ☐ Water / well facility: Include lines, water meters, well house, well protection area
- ☐ Other facilities: Include power lines, generators, propane tanks, heat pumps, solar
- ☐ Historically significant structures on or adjacent to the property (e.g. constructed over 50 years ago or listed on the local or national historic register)
- ☐ Access to the property (existing and proposed): Dimension adjacent rights-of-way / access easements and driving surface width. Depict access from a right-of-way, emergency services access, driveways, non-motorized access (e.g. sidewalks, trails) and bus stops.

**FIGURE 1**  
FLOW CHART FOR NEW DEVELOPMENT



**FIGURE 2**  
FLOW CHART FOR DETERMINING REQUIREMENTS FOR REDEVELOPMENT

